

STATEMENT OF BASIS

as required by LAC 33:IX.3109, for draft Louisiana Pollutant Discharge Elimination System Permit No. LA0065153 to discharge to waters of the State of Louisiana as per LAC 33:IX.2311.

The permitting authority for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

- I. **THE APPLICANT IS:** St. Tammany Parish Sewerage District No. 6
Activated Sludge Plant
P. O. Box 636
Covington, LA 70434
- II. **PREPARED BY:** Paula M. Roberts
DATE PREPARED: July 5, 2006
- III. **PERMIT ACTION:** renewal of LPDES permit LA0065153/AI 19210
LPDES application received: April 28, 2006

IV. **FACILITY INFORMATION:**

- A. The application is for the discharge of treated sanitary wastewater from an existing publicly owned treatment works serving the areas outside of the Covington city boundary and to the north of the Abita Springs city limits. This area includes Claiborne Hill, Lonesome Pine, Vineyards Subdivision, Chandler Subdivision, and Abita Nursery Subdivision and areas in between.
- B. The application does indicate the receipt of industrial wastewater. The industrial discharger includes:
- | <u>Name of Discharger</u> | <u>Flow</u> |
|---------------------------|---------------------------|
| Abita Brewery | 30,000 GPD to 50, 000 GPD |
- C. The facility is located at 21168 Heintz Street in Abita Springs; St. Tammany Parish, Louisiana.

The treatment system consists of an activated sludge treatment plant and is followed by chlorination for disinfection.

- D. **Outfall 001**
Discharge Location: Latitude 30° 28 ' 09" North
 Longitude 90°02' 51" West

Description: treated sanitary wastewater

Design Capacity: 0.300 MGD

Type of Flow Measurement that the facility is currently using: Continuous totalizing recorder

V. **RECEIVING WATERS:**

The discharge from Outfall 001 is from an effluent pipe, thence into an unnamed ditch, thence into the Abita River in segment 040804 of the Lake Pontchartrain Basin. Segment 040804, Bogue Falaya River-Headwaters to Tchefuncte River is listed as Scenic. The Scenic River segment is limited to the Confluence of East and West Prong to LA Hwy.437, north of Covington. Also, this segment is listed on the 303(d) list of impaired waterbodies.

The designated uses and degree of support for Segment 040804 of the Lake Pontchartrain Basin are as indicated in the table below^{1/}:

Overall Degree of Support for Segment 040804	Degree of Support of Each Use							
	Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Oyster Propagation	Limited Aquatic Life and Wildlife Use	Agriculture
Partial	Not	Full	Not	Full*	N/A	N/A	N/A	N/A

^{1/}The designated uses and degree of support for Segment 040804 of the Lake Pontchartrain Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2002 Water Quality Management Plan, Volume 5, Part B, Water Quality Inventory respectively.

* The use designation for outstanding natural resources waterbody as stated in LAC 33:IX.1111.G, applies only to the waterbodies specifically identified in LAC 33:IX.1123 (Table 3) and not to their tributaries or distributaries unless so specified. For this subsegment, Bogue Falaya River-Headwaters to Tchefuncte River is specifically identified in Table 3 of LAC 33:IX.1123, therefore, neither the unnamed ditch nor the Abita River is subject to this use designation.

Subsegment 040804, Bogue Falaya River-Headwaters to Tchefuncte River (Scenic), is listed on LDEQs Final 2004 305(b)/303(d) Integrated Report as being impaired for Chloride, Mercury, and Total Fecal Coliform. To date no TMDLs have been completed for the Lake Pontchartrain Basin, however, these impairments will be addressed in this permit in the form of effluent limitations or a report requirement. Also, a reopener clause will be placed in the permit to allow for the requirement of effluent limitations and other requirements as imposed by any future TMDLs.

Chlorides are salts resulting from the combination of the gas chlorine and various metal ions. Chlorine alone in the form of Cl₂ is very toxic. In combination with a metal ion, such as sodium and in small amounts, it becomes an essential element for normal cell function.

The common chlorides are soluble and not fixed in the soil so that they can move through the soil and into the drainage water from the following sources: 1) rocks containing chlorides; 2) agricultural runoff; 3) wastewater from industries; 4) oil well wastes; 5) effluent wastewater from wastewater treatment plants and; 6) road salting.

Despite the beneficial impact to cell function, chlorides can contaminate fresh water streams and lakes. At high concentrations, chlorides will inhibit plant growth, as well as diminish the survival of fish and aquatic communities.

Since Chlorides is listed on the 2004 Integrated Report as a Category 3 listing and there is insufficient data to determine if the uses are being attained, a report requirement for Chlorides will be imposed in the permit. Based upon the fact that this facility has a continuous flow, monitor and report is imposed in an effort to gather information concerning the amount of chlorides being discharged from this facility, if at all. This may be beneficial should Chlorides become an impairment in the future.

Fecal coliform is a bacteria that occurs in the digestive tracks of warm-blooded animals. Fecal coliform can enter a stream by direct discharge from mammals and birds, from agricultural runoff, or from open or broken sewers. Fecal coliform is itself non-pathogenic; however, it is evidence of the presence of fecal wastes that may contain pathogenic microbes. Since this is a point source discharger discharging treated sanitary wastewater, monitoring for fecal coliform colonies is the

best indicator for the potential presence of pathogenic microorganisms in wastewater. Therefore, to protect against the development of pathogenic organisms in the receiving waterbodies, fecal coliform limits are established in the permit.

The Mercury impairment listed for subsegment 040804 applies only to those waterbodies specifically identified in LDEQ's Final 2004 Integrated Report, and not to the entire subsegment unless so specified. Because the discharge from this facility is not directly into the Bogue Falaya River, Mercury will not be addressed in permit development.

VI. ENDANGERED SPECIES:

The receiving waterbody, Subsegment 040804 of the Lake Pontchartrain Basin is listed in Section II.2 of the Implementation Strategy as requiring consultation with the U. S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated October 21, 2005 from Watson (FWS) to Gautreaux (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, further informal (Section 7, Endangered Species Act) consultation is required. A copy of the statement of basis and draft permit will be sent to the U.S. Fish and Wildlife Service (FWS) to evaluate if the discharge will be a threat to the conservation of the threatened and endangered species of the Gulf sturgeon.

VII. HISTORIC SITES:

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the "Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana State Historic Preservation Officer is required.

VIII. PUBLIC NOTICE:

The public notice is published in the local newspaper of general circulation and the Office of Environmental Services Public Notice Mailing List. Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit to the LDEQ contact person, listed below, and may request a public hearing to clarify issues involved in the permit decision. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation
Department of Environmental Quality Public Notice Mailing List

For additional information, contact:

Ms. Paula M. Roberts
Permits Division
Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

IX. PROPOSED PERMIT LIMITS:

OUTFALL 001

Final effluent limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Final Effluent Limits:

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
CBOD ₅	25	10 mg/l	15 mg/l	Limits are based upon the Water Quality Management Plan, Vol. 8, Appendix A, Aerawide Effluent Limitations Policy (AELP) for facilities of this size and treatment type discharging in St. Tammany Parish *
TSS	38	15 mg/l	23 mg/l	Since there is no numeric water quality criterion for TSS, and in accordance with the current Water Quality Management Plan, the TSS effluent limitations shall be based on a case-by-case evaluation of the treatment technology being utilized at a facility. Therefore, a Technology Based Limit has been established through Best Professional Judgment for the type of treatment technology utilized at this facility.
Ammonia-Nitrogen	13	5 mg/l	10 mg/l	Limits are based upon the Water Quality Management Plan, Vol. 8, Appendix A, Aerawide Effluent Limitations Policy (AELP) for facilities of this size and treatment type discharging in St. Tammany Parish *
Chlorides	N/A	Report	Report	Best Professional Judgment based upon listing on LDEQ's 2004 Integrated Report dated August 17, 2005

* All sanitary wastewater treatment facilities which discharge directly into any of the following waterbodies or into waterbodies which contribute to and are contained within the drainage area of both the Lake Pontchartrain Basin and the Pearl River Basin. These waterbodies include, but are not limited to the following: West Pearl River, Bayou Lacombe, Tchefuncte River, Bogue Falaya River, Abita River, Bayou Bonfouca, Bayou Liberty and Lake Pontchartrain.

Other Effluent Limitations for Outfall 001

1) Fecal Coliform

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.a, the fecal coliform

standards for this water body is 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgment in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) pH

According to LAC 33:IX.3705.A.1., POTW's must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C., the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

3) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

X. PREVIOUS PERMITS:

LPDES Permit No. LA0065153: Issued: July 5, 2001
 Effective: August 1, 2001
 Expired: July 30, 2006

During the period beginning the effective date of the permit and lasting through the expiration date of the permit (Design 0.3 MGD)

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>			<u>Monitoring Requirements</u>	
	lbs./day	other units		Measurement	Sample
	Monthly	Monthly	Weekly	Frequency	Type
	Avg.	Avg.	Avg.		
Flow	---	Report	Report	Continuous	Recorder
CBOD ₅	25	10 mg/l	15 mg/l	2/month	Grab
TSS	38	15 mg/l	23 mg/l	2/month	Grab
Ammonia-Nitrogen	13	5 mg/l	10 mg/l	2/month	Grab
Fecal Coliform Colonies	N/A	200	400	2/month	Grab
pH	---	6-9 Standard Units		2/month	Grab

This permit contained pollution prevention requirements.

XI. ENFORCEMENT AND SURVEILLANCE ACTIONS:

A) Inspections

A review of EDMS indicates the following inspections were performed during the period beginning June 2004 and ending June 2006 for this facility.

Date – September 5, 2005

Inspector(s) – Mary David, Faye Taylor, and Greg Davison, LDEQ/Southeast Regional Office

Findings and/or Violations:

A facility inspection was done to assess damages to wastewater treatment infrastructure as a result of Hurricane Katrina. The facility was not operating and was unmanned. No power. No flooding or submerged areas. Did not appear to be damage but no access to plant.

Date – May 10, 2005

Inspector(s) – John Calvin, LDEQ/Southeast Regional Office

Findings and/or Violations:

A compliance evaluation inspection was conducted to verify the facility is meeting the requirements of their LPDES permit:

1. Aeration was operational, mixed liquor appeared adequate for treatment.
2. Clarifiers appeared to be in an adequate condition.
3. They use chlorine gas for disinfection.
4. The effluent was odorless and free of floating solids, foam, and other debris. Grease balls are skimmed off the surface daily.
5. The flow meter was last calibrated on 1/26/05.
6. Wasted sludge is removed by Breaux Services, Inc. from the digester.
7. Records are kept organized at the main office. The inspector reviewed DMRs, lab reports, and the MWPP.
8. Curtis Environmental Services, Inc. operates the WWTP and analyzes samples for the parameter specified in Permit # LA0065153.
9. Two permit excursions were reported in the DMRs:

Date	Parameter	Result Avg/Max	Limit Avg/Max
Feb 2003	CBOD ₅	12/22	10/15
Oct 2004	CBOD ₅	12.5/19	10/15

10. The facility had a NH₃ loading non-compliance in June 2004.
11. There was no evidence at the time of the investigation of overflows in the collection system.
12. The facility plans to submit a renewal permit application by July 2005 according to Mr. Moorman.
13. The inspector will complete a DMR calculation for the LPDES 3560.

B) Compliance and/or Administrative Orders

A review of EDMS and TEMPO was done along with consultation with enforcement staff revealed the following enforcement actions (active) administered against this facility from the period beginning May 2002 through July 2006:

LDEQ Issuance:

Enforcement Tracking # - WE-CN-01-0152

Issued – May 21, 2002

Findings:

1. The permittee was issued Compliance Order and Notice of Potential Penalty WE-CN-98-0324 on or about October 20, 1998. The relevant issues addressed in the findings of fact were:
 - 1) Unauthorized discharge.
 - 2) Operation and maintenance deficiencies.
 - 3) Excursion of the permit.

The relevant requirements of the Compliance Order were to:

- A. Cease all unauthorized discharges from the facility and take all steps necessary to meet and maintain compliance with its LPDES permit;
- B. Submit a complete written report including a detailed description of the circumstances of the cited violations, the actions taken to achieve compliance, and corrective or remedial actions taken to mitigate any damages resulting from the violations.

In response to the Compliance Order WE-CN-98-0324, the following actions were taken:

- A. Meeting was scheduled to discuss the order and explain pending issues.
- B. Financial Statement and Auditors Report for 1997 were submitted for review. Minimal funds were available for plant improvements and upgrades.
- C. Modifications to the existing "new" pre-treatment system were underway and completion was expected by March 1999. These modifications were to insure minimal loading to the District's plant.

2. An inspection conducted on February 19, 2001, revealed the flow meter had a maximum deviation of greater than 10% from the true discharge rates. Field measurements taken at the time of the inspection revealed an 11.9% error in the measurement values.
3. An inspection conducted on February 19, 2001, revealed that the laboratory used by the permittee for sample analysis was not following the approved laboratory methods for CBOD₅ analyses. Specifically, a review of the laboratory analysis/chain of custody documents by the inspector revealed the 48-hr. CBOD₅ holding times were exceeded for four separate CBOD₅ samples collected. The holding times were exceeded for the CBOD₅ samples collected on January 12, 2000, January 19, 2000, April 5, 2000, and June 17, 2000.
4. A file review conducted by the Department on May 14, 2002, revealed numerous excursions reported on the Discharge monitoring reports and noncompliance reports. Between the reporting period of July 28, 1998 and March 2002, the permittee reported the following excursions: CBOD₅ (Monthly Avg. & 30-day Avg.)-33, CBOD₅ (Daily Max)-28, TSS (30-day Avg.)-2, TSS (Daily Max)-1, Ammonia-Nitrogen (30-day Avg. & Monthly Avg.)-11, Ammonia-Nitrogen (Daily Max)-9, Fecal Coliform (30-day Avg. & Monthly Avg.)-1, Fecal Coliform (Daily Max)-3.
5. A file review conducted by the Department on May 14, 2002, revealed that the permittee failed to submit noncompliance reports for excursions from the effluent limitations as required by the permit.

Order:

1. To immediately take any and all steps necessary to meet and maintain compliance with LPDES permit LA0065153, including but not limited to submitting NCRs for excursions of the permit, and meeting all effluent limitations.
2. To submit a complete written report that shall include a detailed description of the circumstances of the cited violations, the actions taken to achieve compliance with the Order, and corrective or remedial actions taken to mitigate any damages resulting from the violation.

The permittee was also advised of their right for an adjudicatory hearing on a disputed issue of material fact or of law arising from the Compliance Order; the specifics concerning a request for an adjudicatory and timely filing.

The permittee was also advised of the civil penalties that could be assessed for each day of violation for the violations described in the order.

Penalty:

1. The permittee was notified that the issuance of a penalty assessment was being considered for the violations described in the order. Written comments could be filed regarding the violations and the contemplated penalty.
2. The permittee was also notified that they may request a meeting with the Department to present any mitigating circumstances concerning the violations.
3. The permittee was required to forward the most current gross revenue statement along with a statement of the monetary benefits of noncompliance for the cited violations so that a determination could be made whether a penalty will be assessed and the amount of such penalty.

EPA Issuance: None

C) DMR Review

A review of the discharge monitoring reports for the period beginning December 2003 through December 2005 has revealed the following violations:

<u>Effluent Characteristic</u>	<u>Number of Violations</u>
CBOD ₅ Mon. Avg.- (concentration)	5
CBOD ₅ Weekly Avg.- (concentration)	4
Ammonia-Nitrogen Mon. Avg.- (concentration)	1
Ammonia-Nitrogen Weekly Avg.- (concentration)	1

A detailed report is attached.

XII. ADDITIONAL INFORMATION:

Final effluent loadings (i.e. lbs/day) have been established based upon the permit limit concentrations and the design capacity flow of 0.3 MGD. Effluent loadings are calculated as shown in the following example:

$$\text{CBOD}_5 = 8.34 \times 0.3 \times 10 \text{ mg/l} = 25 \text{ lbs/day}$$

The Monitoring Requirements, Sample Types, and Frequency of Sampling for facilities with flows of 0.1 MGD to 0.5 MGD are 2/month:

<u>Effluent Characteristics</u>	<u>Monitoring Requirements</u>	
	<u>Measurement</u>	<u>Sample Type</u>
Flow	Continuous	Recorder
CBOD ₅	2/month	Grab
Total Suspended Solids	2/month	Grab
Fecal Coliform Bacteria	2/month	Grab
Ammonia-Nitrogen	2/month	Grab
Chlorides	1/quarter	Grab
pH	2/month	Grab

The Department of Environmental Quality will be conducting TMDLs for the Lake Pontchartrain Basin scheduled for completion March 31, 2011. The Department of Environmental Quality reserves the right to modify or revoke and reissue to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional water quality studies and/or TMDLs. These studies may indicate the need for advanced wastewater treatment. Studies of similar dischargers and receiving water bodies have resulted in monthly average effluent limitations of 5 mg/l CBOD₅, and 2 mg/l NH₃-N. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

Pollution Prevention Requirements:

The permittee shall institute or continue programs directed towards pollution prevention. The permittee shall institute or continue programs to improve the operating efficiency and extend the useful life of the facility. The permittee will complete an annual Environmental Audit Report each year for the life of this permit according to the schedule below. The permittee will accomplish this requirement by completing an Environmental Audit Form which has been attached to the permit. Please make additional copies to be utilized for each year of this permit.

The audit evaluation period is as follows:

<u>Audit Period Begins</u>	<u>Audit Period Ends</u>	<u>Audit Report Completion Date</u>
Effective Date of Permit	12 Months from Audit Period Beginning Date	3 Months from Audit Period Ending Date

XIII. TENTATIVE DETERMINATION:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in this Statement of Basis.

XIV. REFERENCES:

Louisiana Water Quality Management Plan, Vol. 8, Appendix A "Areawide Effluent Limitations Policy", Louisiana Department of Environmental Quality, 2005.

Louisiana Water Quality Management Plan, Vol. 5, Part B, "Water Quality Inventory", Louisiana Department of Environmental Quality, 2002 and 2004.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards", Louisiana Department of Environmental Quality, 2006.

LA 2004 Integrated Report with FINAL EPA Additions, August 17, 2005.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 23 - "The LPDES Program", Louisiana Department of Environmental Quality, 2006.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, St. Tammany Parish Sewerage District No.6, Activated Sludge Plant, April 28, 2006.

Exploring the Environment: Water Quality Assessment:Chemical:Fecal Coliform, last updated November 10, 2004, copyright 1997-2004 by Wheeling Jesuit University/NASA, <http://www.cotf.edu/ete/modules/waterq3/WQassess3g.html>.